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Article from the field…

Manzer Silk

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Do you have a field trip that has a bridge more than 20 ft above the river surface? Do you wear the thickest padded leather gloves and still get the palm burn from lowering ADCP boats? Do you find the ADCP harder to lift at the end of the day because you swear it must have picked up water? Do you remember the 80's and someone in your family sported a mullet? Then I have the solution for you: The Manzer Silk. It is slick like silk and soft on the technician that uses it.

The standard bridge board can now be dragged out of storage and used again. The Manzer Silk is a sailboat winch coupled with a standard bridge board that can be quickly attached and removed. It uses the center hole in the bridge board reel-mounting plate as its anchor point. The Manzer Silk will work with ropes ¼-inch to 3/8-inch diameter.

The three pieces that make up the design can be purchased from your Government Amazon account:

- The Harken #6 Single-Speed Aluminum Winch (Amazon price of $176.38)
- The Five Oceans Lock-in Aluminum Winch Handle, 8 inches FO-122-1 (Amazon price of $25.99)
- The Nite Ize Figure 9 carabiner large rope tightener two pack (Amazon price of $13.47)
- Other parts as described below are
  - Aluminum plate, ¼ inch thick, 4 x 4 inch square
  - Stainless steel bolt with lock washer, 2 inch
  - Pan head stainless screws, 6-3/4 inch
  - Wing nut, ½ inch
  - Rope, ¼ to 3/8 inch

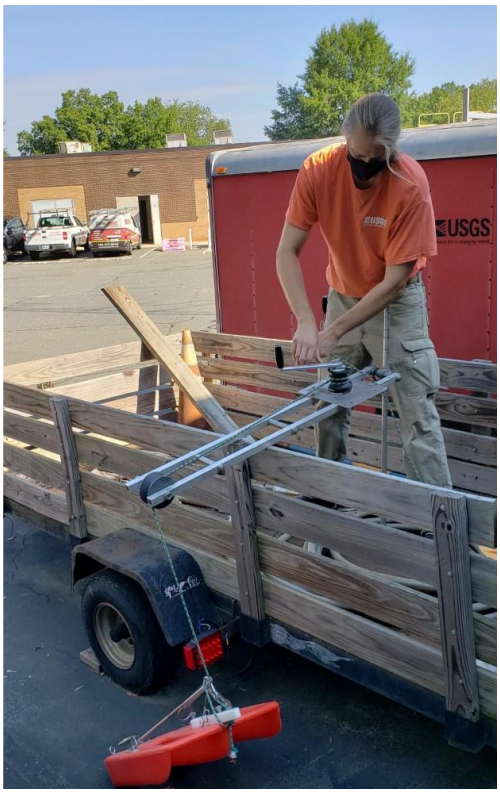

Figure 1.—Manzer Silk assembled for use.

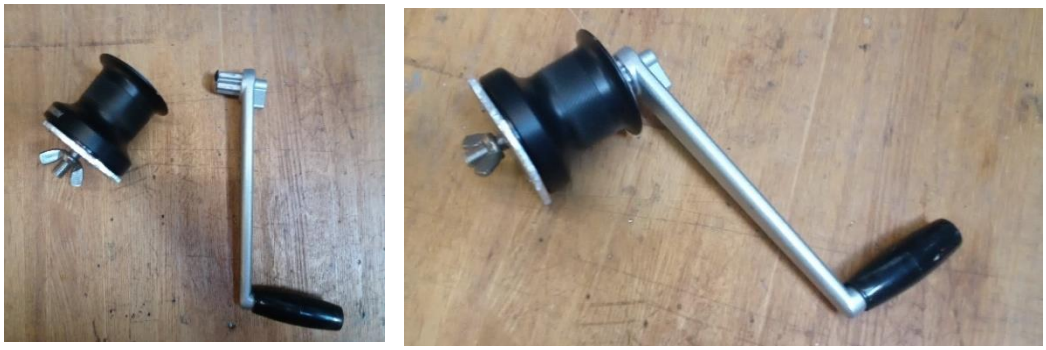

Figure 2.—Left, Harken #6 single-speed winch and Five Oceans Lock-in Aluminum Winch Handle winch handle. Right both pieces assembled.

The Harken #6 single-speed winch is attached to a mounting plate made from a ¼ inch aluminum plate that is four inches square. The mounting plate is taped with a ½ inch coarse thread for the center hole and ¼ inch coarse threads for the mounting holes (fig. 3).

One 2-inch stainless steel bolt with a lock washer is tightened into the center hole. Then the body of the winch is screwed into place using 6¾ inch pan head stainless-steel screws (fig. 4). A ½ inch wing nut is used for the quick attachment and detachment of the winch (fig. 5). A photo illustrating the rope installed on the winch (fig. 6) and rope from the winch to the end pulley (fig. 7) are shown. For further information or if you have any questions, please contact Josh Manzer at (704) 790-2627.

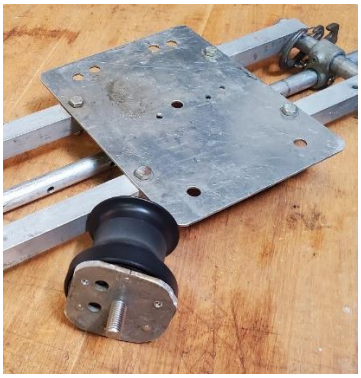

Figure 3.—Front center, 4-inch square mounting plate attached to Harken #6.

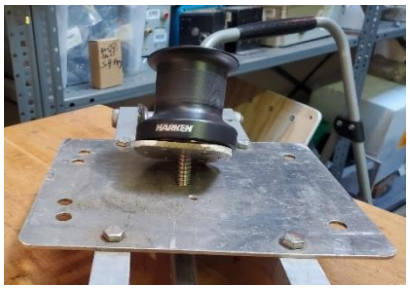

Figure 4.—Two-inch stainless steel bolt inserted in plate.

Figure 5.—Plate underside showing wing nut attached to winch bolt.

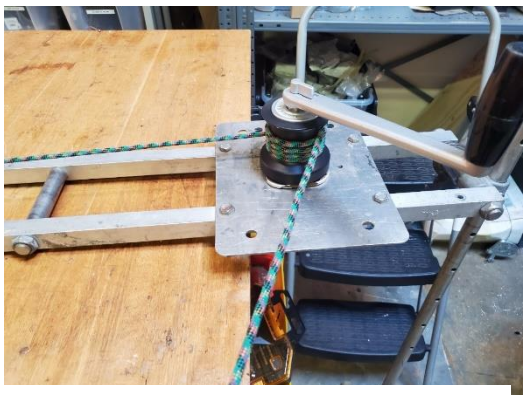

Figure 6—View of rope wrapped on winch.

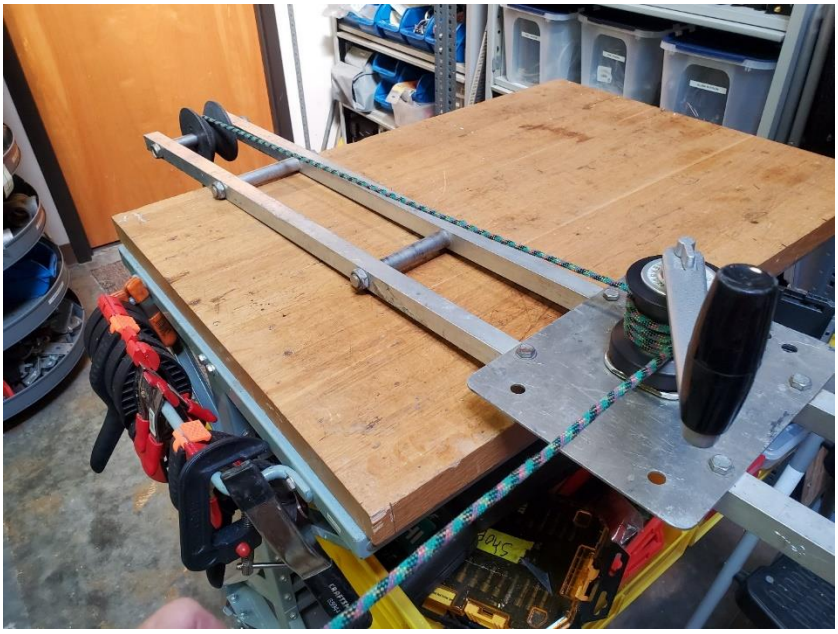

Figure 7.—Full view with rope wrapped on winch down arm and over pulley.